

August 1, 2011

Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Re: Comment submission on IB Docket No. 11-109,

*'LightSquared Subsidiary LLC Request for Modification of its Authority for an Ancillary Terrestrial* 

Component'

The Association of Equipment Manufacturers (AEM) is pleased to have the opportunity to offer comments on the Public Notice released by the Federal Communications Commission (FCC) seeking comment on the final report of the Technical Working Group (TWG) regarding the January 2011 order granting LightSquared Subsidiary LLC a waiver to test whether their proposed terrestrial network would cause harmful interference to Global Positioning System (GPS) receivers. On behalf of our member companies I urge the FCC to not allow LightSquared to move forward with their proposal due to the findings of significant interference to GPS.

AEM is a U.S.-based trade association providing services on a global basis to companies that manufacture equipment, products and services used worldwide in the agriculture, construction, forestry, mining and utility fields. Our 850 member companies represent over 200 product lines.

The TWG's three month review tested more than 130 devices in seven different receiver categories in multiple environments. The results clearly show LightSquared's proposed terrestrial network caused harmful interference to GPS receivers. Additionally other governmental and non-governmental organizations also conducted testing only to reach the same conclusion as the TWG. Near the end of the testing period when these results appeared inevitable, LightSquared announced a new "solution" to the interference dilemma by proposing to begin its terrestrial operations using only the lower 10 MHz channel (the 1526-1536 MHz band). Despite this proposal having not been included in the submitted plans, TWG was able to test LightSquared's alternative lower 10 MHz proposal. The findings of these tests determined even the alternative proposal raised interference concerns. The TWG also considered mitigation techniques suggested by LightSquared – the use of filters – and found them to be unproven, untested, unavailable and unverified.

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These results greatly concern AEM as our member companies have invested billions of dollars on the research and development of equipment products dependent on an uninterrupted GPS signal. This industry dedication to product innovation has resulted in the deployment of technologies that have revolutionized sectors of our economy. For example, modern agricultural equipment, using GPS, has allowed "precision agriculture" to transform farming methods helping to achieve increased food production while decreasing the amount of inputs such as fuel, fertilizer, seed and pesticides. Furthermore, GPS dependent agricultural equipment set to be introduced in the next few years will again radically change, and improve, the way farms produce the food necessary to feed a growing world.

GPS technology has also become critical to improving the productivity, efficiency and safety on construction job sites. Increasingly, the technology is used to map and survey construction sites including the location of buried and overhead utilities, facilitates precision grading and enhance material application. It is also used to prevent theft of construction equipment, and provide real-time monitoring for equipment maintenance. This GPS technology helps improve worker safety, reduces project delays, reduces fuel consumption and produces a more efficient worksite. Any interference with these signals would be extremely disruptive to the many benefits GPS has brought to the construction sector.

The results of the TWG's extensive study clearly demonstrate allowing LightSquared to move forward is reckless and doing so places GPS based equipment at certain risk. For these reasons we ask that the FCC not allow LightSquared to proceed with their submitted plan.

Thank you for the opportunity to comment on this important subject.

Sincerely,

Dennis Slater President